Work Order II April-04-14 10:14:28			*115	5606*	_						Page 1	
tem ID: D340 Revision ID: tem Name: Tow I)7-041 Ring		Accept	*N900	040	100)* s	etup St	•		\$1* \$2*	
Start Date: 4/04/ Required Date: 4/04/ Reference:				Cust Item I Customer:	D:							
Approvals: Pro	cess Plan:M_\	Date: 14-04-09	Tooling: _ SPC (Y/N):		ate:		R		top		२1* २ 2 *	
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty			Insp. Stamp	
Draw Nbr	Revision Nbr							<u> </u>				
D3407	Rev E										14	-08
Marge Fab Large Fab		07-1/-5 using welding rod TI IG174 ROD Batch:	0.00 0.00 G174 as per Dwg D3407	' & QSI 004			10					J
*110 *110* QC Quality Control	QC9- Inspect visual pe Memo	r QS1004- Fusion Welds	0.00				10	JU	L 3 1	2014	DAS 24 9-69	
¹²⁰ *1クハ* OC	QC5- Inspect part com	pleteness to step on W/O	0.00				10-		JUL 3	1 20	DAS 24 14 9-89	

Quality Control

DQA:	Date:										DART				
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UP		\\/or	k Order w	pdate only	\neg	AEROSPACE
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Work Orde	er:	-	•			DISPOSITION									
	•					Rework]	j	Skid-tube	Crosstube		Water Jet			Engineering
Part N	No.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.	\exists	Quality
						Use-as-is	1	Thern	noforming	Finishing	П		re/Packaging		Other
NCR N	No.					Suspected Unapproved]		Large Fab	Composite			Supplier		
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		Bending				Bend	<u> </u>	- 1	Program		-	Outside Dim	· •	-	Pressure/Forced
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		Cracks	ala/Dimmla	/\A1==		Broken/Damage/Defect	\vdash	Hardwa		من ماند ما		art Incorre		\dashv	Temperature/Cure Weld
jat	<u> </u>	Crimp/Kir		/ wave		Burrs	-	4	ion Incomplete/Un	·	${f o}$	art Lost/Mi	issing	_	
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					-	-	Misread			۲	ower Loss/	onige [Ottlei	
					Drill Holes	Off-set									
	Turning Sequence Finish					4	-	4	Calibration		-				
	Wave/Twist in Tube				\vdash	Fit/Function	\vdash	4	Seguence		-				<u> </u>

Work Orde <i>April-04-14 10:</i>		5606		*115606*										
Revision ID: Item Name:	D3407-041 Tow Ring 4/04/14 4/04/14	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*	Accept	*N900 Cust Item I		100)*	Setup Star Stop	IV	S1* S2*			
Reference:							_	T	Ston					
Approvals:	Process Pla		Date:	Tooling: SPC (Y/N):	Date:			ŀ	Run Star Stop	^I\I	R1* R2*			
Sequence ID/ Work Center II 130 *120* Powdercoat Powder Coating)	START TIM	eaded Segtion** IE: 7/10 PERATURE: 400	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	<u>-</u>			
140 +4 4 0 +		QC3- Inspect Part Finish		0.00				10		ac ac	Mola			
140 ^{QC}		Memo		0.00				10	1 C		1100/20			

150

Identify as per dwg & Stock Location: 57.5 300.00

150 Packaging

Quality Control

Memo

0.00

DAS 28 9-89 AUG 2 0 2014

Packaging

DQA:	Date:										DART					
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	\٨/	ork Order u	ndate only	<u> </u>	AEROSPACE		
QA Closed.			Date.			DISPOSITION			4.04100					<u> </u>		
Work Orde	er:					DISPOSITION			AGAINST							
			•			Rework			Skid-tube Crosstube	:[Water Jet	Engineering			
Part N	lo					Scrap			Machining Small Fab	\Box	Pro	d. Eng. Coor.		Quality		
•						Use-as-is		Therr	moforming Finishing	-	Rec/Sto	re/Packaging	e/Packaging Other Other			
NCR No.						Suspected Unapproved			Large Fab Composite	<u>'</u>		Supplier				
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\hat{A}	Crimp/Kink/Ripple/Wave				-	Burrs		1	ion Incomplete/Unqualified	-	Part Lost/Mi	ssing		Weld		
	Crushing					Contamination Countersink	<u> </u>	4	tions Incomplete/Unclear gned/off center		Part Moved	· /		Wrong Stock Pulled		
	Crushing				-	Cut Too Short		Mislabe		-	Positioned V Power Loss/	-		Other		
	Heat Treat				\vdash	Drawing	\vdash	Misrea			Trower ross/	ouige		Joulei		
	Inspection Strip in Tube Marks/Chatter					Drill Holes	-	Off-set			C					
	Turning Sequence Finish					1	\vdash	4			<u></u>					
						Fit/Function	Out of Calibration Out of Sequence									
	Wave/Twist in Tube					i ity i unction		Jour of 3	sequence							

Work Orde		5606				Page	3						
Revision ID:	D3407-041 Tow Ring			Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date: Reference:	4/04/14 4/04/14	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item I Customer:	D:				Q			
Approvals:	orovals: Process Plan: QC:		Date:	Tooling: SPC (Y/N):	D:]	Run	Start Stop		R1* R <i>2</i> *			
Sequence ID/ Work Center II)	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
160 QC Quality Control		Memo	Order Release	0.00				ML	<u> </u>	14-0	X-29		-

DQA:	Date:									TART			
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPDATE	Wa	ork Order up	ndate only 「	AEROSPACE
		***************************************				DICDOCITION			ACAING		•		
Work Ord	er:					DISPOSITION			AGAINST				
Part f	No.					Rework Scrap			Skid-tube Crosstube Machining Small Fab	-	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR I				Use-as-is Thermoforming Finishing Rec/Store/Packaging Suspected Unapproved Large Fab Composite Supplier							Other		
Root					Desc	ription of work order update	1	Initial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	n QC Inspector
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		Bending				Bend		Folio/F	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorred	ાં [Temperature/Cure
		Crimp/Kink/Ripple/Wave Burrs				Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld
	Cuffs Contamina				Contamination		Instruct	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled	
:		Crushing				Countersink		Misali	gned/off center		Positioned V	الم Vrong	
		Heat Trea	at			Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other
		Inspectio	n Strip in	Tube		Drawing		Misrea	d ·				
	Marks/Chatter Drill Holes				Off-set								
	Turning Sequence Finish					Finish		Out of	Calibration				
						Fit/Function		Out of	Seguence				

Work Order ID: 115606

115606

Parent Item:

D3407-041

D3407-041

Parent Item Name: Tow Ring

Start Date: 4/04/14

Required Date: 4/04/14

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP Rev:A05.10.14New issueKJ/EC

IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3407-1		Manufactured	No			100	Each	48.0000	1	10			
D3407-1									**				14-08-0
				Location		Loc	<u>Oty</u>	Loc Code	,				Jr _s
				WA001	121455,		48		\tilde{I}	/b'			
					103869		6		_		_		
					109128		2		_		_		
					113621		40		_		_		
D3407-5		Manufactured	No			100	Each	0.0000	1	10			
D3407-5									**				14-08-0 M

DQA:	Date:									TOART			
QA Closed:			Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UF	PDATE	Work Order u	ndate only - [AEROSPACE
QA Closed.			Date.										
Work Orde	er:					DISPOSITION	DISPOSITION AGAINST DEPARTMENT						
						Rework		Skid-tube	Crosstube		Water Jet	Engineering	
Part No.						Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is		Thermoforming Finishi			Rec/Sto	re/Packaging	Other
NCR No.						Suspected Unapproved			Large Fab	Composite		Supplier	
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Design													
Doc/Data													
Equip/Tooling													
Handling/Pre							ļ						
Material							İ						
Operator													
Offset/Setup													
Process			1										
Supplier												1	
Training			-										
Transport													
Unapproved			<u> </u>		<u> </u>								
							FA	ULT CA	TEGORY				
Landi	ng (Gear				General				,		_	_
		Bending				Bend	·	Folio/F	Program		Outside Din	nensions	Pressure/Forced
		Centre N	ot Concer	ntric		BOM/Route	L	Grain			Over/Under	tolerance	Set-up
		Cracks			<u> </u>	Broken/Damage/Defect		Hardwa	are		Part Incorre	cí [Temperature/Cure
		Crimp/Kink/Ripple/Wave				Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/M	issing	Weld
		Cuffs				Contamination		Instruct	tions Incomplete/U	nclear	Part Moved	. [Wrong Stock Pulled
	Crushing					Countersink	L	Misalig	gned/off center		Positioned \	Wrong	_
						Cut Too Short	Ĺ	Mislabe	eled		Power Loss,	/Surge	Other
						Drawing		Misrea	d				
	Marks/Chatter Drill Holes							Off-set					
1	Turning Sequence Finish							Out of	Calibration				
	Wave/Twist in Tube					Fit/Function		Out of	Sequence				

SHOP COPY QTY PART NUMBER DESCRIPTION RETURN TO TOW RING D3407-041 ENGINEERING TOW RING D3407-043 UNCONTROLLED COPY TOW RING D3407-045 D SUBJECT TO AMENDMENT D3407-1 STEM D3407-3 STEM WITHOUT NOTICE D3407-5 RING WORK ORDER MUS D3407-7 STEM 14-04-08 E -D3407-5 RING -D3407-5 RING D3407-5 RING 8 8 [8] E -D3407-1 STEM -D3407-3 STEM -D3407-7 STEM D3407-041 TOW RING **D3407-043 TOW RING** <u>D3407-045 TOW RING</u> ≜ ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 5 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY 08.07.23 D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY 08.04.07 C -1/-3 LONGER FOR FIT W/WASHER 05.09.09 В UPDATE DIAMETER, THREAD CLASS ADDED CP 05.06.17 Α NEW ISSUE CP 05.03.16 REV. DESCRIPTION DATE BY DESIGN DART AEROSPACE USA, INC. DRAWN PORT HADLOCK, WA 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED DRAWING NO. CHECKED REV. E D3407 MFG. APPR SHEET 1 OF 5 5) BREAK SHARP EDGES: N/A APPROVED SCALE 3) BICAN SHARE EDGES, IVA 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

5

DE APPR.

08.07.23

TOW RING

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